Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): Device for the production of tuneable picosecond light pulses in the visible spectral range, having a laser system (LS) that emits femtosecond light pulses in the infrared spectral range, and having an optical frequency converter (FC) for converting the wavelengths of the light pulses into the visible spectral range, wherein the wavelength of the light pulses emitted by the laser system (LS) can be tuned, whereby the conversion of the wavelength of the light pulses by means of the frequency converter takes place in such a manner that the wavelength of the light pulses ~~emitted by the laser system (LS)~~ in the visible spectral range can be tuned, whereby an optical stretcher (OS) is provided, by means of which the pulse duration of the frequency-converted light pulses can be increased to at least 1 ps.

Claim 2 (previously presented): Device according to claim 1, wherein the frequency converter (FC) comprises one or more frequency doubler(s).

Claim 3 (currently amended). Device according to claim 1, comprising at least one optical frequency filter that is ~~switched~~ located either ahead of or after the frequency converter (FC).

Claim 4 (currently amended): Device according to claim 1, wherein the wavelength of the light pulses emitted by the laser system (LS) can be tuned at least in the range between 1 µm and 2 µm~~, preferably between 800 nm and 2 µm~~.

Claim 5 (currently amended): Device according to claim 1, wherein the optical stretcher (OS) is formed by at least one dispersive optical element that is ~~switched~~ located after the frequency converter (FC).

Claim 6 (currently amended): Device according to claim 1, wherein the laser system has a non-linear optical fiber (3) for the production of the tuneable light pulses, by means of which the optical spectrum of femtosecond light pulses can be modified using solitonic effects, whereby an optical compressor (2) is ~~switched~~ located after the non-linear optical fiber (3).

Claim 7 (previously presented): Device according to claim 6, wherein the light pulses that are coupled into the non-linear optical fiber (3) have a pulse energy of at least one nanojoule.

Claim 8 (previously presented): Device according to claim 6, wherein the optical compressor (2) is configured to be adjustable, in such a manner that the time/frequency progression of the light pulses coupled into the non-linear optical fiber (3) can be modified.

Claim 9 (previously presented): Device according to claim 6, wherein the non-linear optical fiber (3) maintains polarity and/or shifts dispersion.

Claim 10 (previously presented): Device according to claim 6, wherein the non-linear optical fiber (3) has a core diameter of less than five micrometers.

Claim 11 (previously presented): Device according to claim 6, wherein the non-linear optical fiber (3) is configured as a microstructured photonic fiber.

Claim 12 (previously presented): Device according to claim 6, wherein the length of the non-linear optical fiber (3) is less than one meter.

Claim 13 (currently amended): Device according to claim 6, comprising an additional optical compressor (6) that is ~~switched~~ <u>located</u> after the non-linear optical fiber (3).

Claim 14 (previously presented): Use of a device according to claim 1 for microscopy, con-focal microscopy, fluorescence spectroscopy, or the automated search for active substances.